

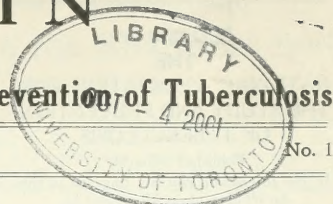


THE PROPERTY
OF
ACADEMY OF
TUBERCULOSIS

BULLETIN

OF

National Association for the Study and Prevention of Tuberculosis



Vol. III.

OCTOBER, 1916.

No. 1

Tuberculosis Week Literature

Orders for literature and requests for information already received by the National Association indicate that Tuberculosis Week from December 3rd to 10th will be more widely observed this year than in any previous year. Anticipating an increased demand for supplies, the Association has prepared a quantity of literature unusually early and is ready to supply your wants promptly.

It is strongly urged that those who have not already made plans for the observance of this week do so at once. While the educational results of Tuberculosis Week are emphasized, there is no doubt that an intensive campaign of seven days will also increase the sale of Red Cross Seals. Money spent on Tuberculosis Week is a good educational and financial investment.

You are urged to take advantage of this National Campaign. If possible, hold your celebration on the same dates. Do not hesitate, however, if local conditions warrant, to change the dates in order to secure better results.

The success of the three feature days of the week last year has warranted similar plans for this year. Wednesday, December 6th will be National Medical Examination Day. Children's Health Crusade Day will be observed on December 8th. Two dates, December 3rd and 10th, have been designated for Tuberculosis Sunday in order that churches may choose the one which will best fit in with their program of services. For those worshipping on Saturday December 2nd or 9th has been set aside.

The fact that Tuberculosis Sunday is an undenominational and non-sectarian

movement should be emphasized in order that all possible religious groups may be reached.

The literature furnished by the National Association, especially for the week, includes the following:

A one-page circular describing the movement, which will be useful for general distribution. Price, 15 cents per hundred.

A four-page folder, "Some Talking Points About Tuberculosis," which will prove valuable to those who expect to lecture about tuberculosis. Every teacher and minister in your community ought to be supplied with a copy. Price, 25 cents per hundred.

The Tuberculosis Day Prayer by Dr. Walter Rauschenbush will be issued again. Price, 10 cents per hundred.

A talk for school-children for use on Children's Health Crusade Day. Price, probably 25 cents per hundred.

A pamphlet on "Periodic Medical Examination" which gives reasons why every one, sick or well, ought to be examined at least annually. Price, 20 cents per hundred.

A sermon on "Indifference to Tuberculosis," written for those who do not wish to prepare their own talk. Price, 15 cents per hundred.

Single copies of any of the above literature will be sent free of charge upon request to the National Association.

If you wish to use the motion-picture service of the National Association during the week it will be necessary to write immediately, as several prints have already been reserved.

"The Great Truth"

A new two-reel motion picture to be known as "The Great Truth" is being produced for the National Association by the Plimpton Epic Pictures, Inc. It will be released for use on November 15th.

The scenario for this picture was written by Mrs. Elise Williamson Phifer, secretary of the Mississippi Anti-Tuberculosis Campaign Committee. Many of those who have read a synopsis of the story have spoken with great enthusiasm of the dramatic and the educational possibilities of the picture. It promises to be one of the most attractive films on tuberculosis and should prove of great value to the anti-tuberculosis campaign.

For the first time the National Association is producing a picture on a co-operative basis. In order to insure the production and distribution of the picture it was necessary to have advance orders for a number of prints. These orders were solicited and secured so that the production is assured and actual work has been started.

Additional orders are invited and anti-tuberculosis associations are urged to consider the advisability of purchasing a print. The price is \$150. In almost any community the film can undoubtedly be rented to theaters, schools and churches, so that at least a part and perhaps all of the purchase price may be obtained. Even if the picture is not rented it will be available during Tuberculosis Week and the Red Cross Seal Campaign and its use ought to increase the Seal sales. Moreover, from an educational point of view a picture of this character is decidedly a low-priced investment.

The National Association will be pleased to furnish further information about the picture upon request.

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THE
NATIONAL ASSOCIATION FOR
THE STUDY AND PREVENTION
OF TUBERCULOSIS

Published Monthly

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Anti-Tuberculosis Movement by

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Pamphlet on Selling Red Cross Seals by Mail

With their Seals and advertising supplies long since ordered a number of state and local agents are already busy preparing their mail-sale letters. While personal solicitation of large purchases comes first on the calendar of events for the campaign, given in Circular B, the preparation of letters should be started very early to make sure that they are posted by November 29th. The National Association has just published a pamphlet entitled "Selling Seals by Mail. The Mail Sale Direct." Copies are now being distributed free through the state seal agent to the local agents. We will send a copy on application to any agent who may be omitted in the distribution. This pamphlet read in connection with our Circular B, which is also sent free on application, makes a complete manual of instruction for the mail-sale method. It also cites results obtained, indicating that this method has proven successful in all sections of the country, north and south, east and west, and among both urban and rural populations. Letters enclosing 100 seals each and a stamped return envelope were sent all the way from New York City to several thousand automobile owners in Montana, Wyoming, Utah and Nevada last year. The ad-

dressées were asked to purchase in support of anti-tuberculosis work under associations yet to be formed in their states, but in spite of distance and little-known tuberculosis within their states their generous response yielded \$3,150 above all costs, to start the work under the four associations now organized in those states.

Many of the letters which proved such good salesmen there went to rural settlements, isolated ranches and mines. To illustrate results in a congested population, the other extreme, the pamphlet refers to the returns from over 200,000 mail-sale letters in New York City, and particularly to a list of 17,000 persons who in 1914 had each declined to purchase seals, when their orders were solicited by letters, not enclosing seals. In response to the mail-sale letters, which enclosed seals on approval, more than \$12,000 was received last Fall from these same 17,000 names.

This year a new method of identifying the replies is recommended. Window envelopes are used for the outside envelope, while the address for the letter is written on the enclosed return envelope in a position to show through its window. This address, which becomes the return card for the addressee when he mails the return envelope to the agent, identifies the reply. If an agent cannot buy window envelopes locally, the ordinary stamped envelopes may be used satisfactorily under the number keying method of identification. On the other hand, window envelopes may be secured through the National Association.

We list here the *approximate* price at which we can obtain stationery and printed matter used in mail-sale letters on agents' orders. Some of these figures are materially higher than those we first quoted. The advancing cost of paper is the cause. Agents will do well to order *at once* in anticipation of a further rise in prices. Where two figures are given for one item the actual cost may be expected to range between the two according to the quantity of orders we can place at once. The prices do not include transportation charges from New York.

Window envelopes No. 10 (4½ by 9½ in.) without printing, \$2.40 to \$2.60 per 1,000.

Red Cross Seal letter-heads, with local address imprinted, \$2.25 per 1,000. (Quantities less than 5,000 will cost slightly more.)

Follow-up post-cards, \$2.00 per 1,000.

Acknowledgment cards, \$2.15 per 1,000.

Record cards for list of addresses, \$.70 to \$1.25 per 1,000.

We recommend that every local agent who lacks proper facilities for preparing mail-sale letters call on his state agent to produce them for him. The National Association has arranged for the preparation of thousands of letters where state agents cannot command facilities.

Additional circulars to be issued by the National Association within a short time and probably all in October are: "Honors and Pennants," the announcement of the third annual competition for National Pennants; "Modern Health Crusaders"; and the story-talk for children on Children's Health Crusade Day (December 8th). Any agent who fails to receive these circulars or Circulars B and C, the guides for selling seals, may secure copies on application to the National Association.

New State Associations

The Vermont Association for the Prevention of Tuberculosis was formally organized at a public meeting in Rutland on August 4th. The officers elected are: President, Thomas Magnier, Burlington; Honorary Vice-Presidents: Hon. C. W. Gates, Franklin; F. C. Partridge, Proctor; Vice-Presidents: Dr. H. D. Holton, Brattleboro; Mrs. R. E. Smith, White River Junction; Rev. A. H. Bradford, Rutland; Secretary, H. W. Slocum, Burlington; Treasurer, A. W. Hill, Burlington; Assistant Secretary-Treasurer, Dr. Grace W. Sherwood, St. Albans.

The organization of the New Hampshire Association for the Prevention of Tuberculosis was completed on September 12th at a meeting in the Y. M. C. A. at Manchester. The officers elected are: President, J. Brodie Smith, Manchester; Honorary Vice-Presidents: Henry W. Keyes, Haverhill; Bishop E. M. Parker, Concord; Mrs. L. M. French, Manchester; Vice-Presidents: Col. George B. Leighton, Monadnock; Mrs. James W. Remick, Concord; Dr. Herbert L. Smith, Nashua; Secretary, Dr. Thomas Chalmers, Manchester; Treasurer, A. H. Hale, Manchester; Assistant Secretary-Treasurer, Mrs. A. H. Harriman, Laconia.

Charles M. DeForest, field secretary of the National Association, assisted in the organization of both societies.

A meeting to reorganize the Tennessee Anti-Tuberculosis Association was held in Nashville on September 21st. A constitution and by-laws were adopted and the following officers were elected: President, Bolton Smith, Memphis; Vice-President, Henry Teitlebaum, Nashville; Secretary, Mrs. Claude D. Sullivan, Nashville; Treasurer, John Stagmaier, Chattanooga; Executive Secretary, James P. Kranz.

At the request of the Tennessee Association, Frederick D. Hopkins, field secretary of the National Association, assisted in the preliminary work of reorganization.

Mr. Kranz has requested the National Association to announce that he would be pleased to receive samples of tuberculosis literature issued by the secretaries of other state associations. His present address is Associated Charities, Memphis, Tenn.

Massachusetts' Equipment for the Care and Treatment of Tuberculosis

By SEYMOUR H. STONE, Secretary,
Massachusetts Anti-Tuberculosis
League, Boston

The plan for the care and treatment of tuberculosis in the State of Massachusetts may be stated as follows:

HOSPITALS.

There are, first of all, four State tuberculosis hospitals which are managed by a State Board of Trustees of Hospitals for Consumptives. Three of these take both early and advanced cases, about half of the beds of one being reserved for children. The fourth hospital receives early cases only. These four institutions have a total of 1085 beds, of which 140 are for children.

In addition to those mentioned above, the State Infirmary for indigents, which is under another Board of Trustees, has a tuberculosis department, including a hospital for men and another for women, with a total bed capacity of 340.

The Board of Prison Commissioners also has a tuberculosis hospital for 100 prisoners, besides which special provision is made for the tuberculous at nearly all of the State insane hospitals, with a total of about 200 beds.

There is a State law which requires every city of 50,000 inhabitants or over to build and maintain a tuberculosis hospital, and it is encouraging to be able to report that, with the exception of two, all the cities of this size, of which there are ten, have complied with this law, thus providing a total of about 1007 municipal beds. This does not include seven smaller communities which maintain hospitals of their own accord (170 beds) or beds in private hospitals and sanatoria (411 beds).

The Legislature has just passed a law by which counties must now furnish hospital accommodations for the communities of less than 50,000 inhabitants, at the rate of one bed to every two deaths, no hospital to have less than fifty beds. (A county hospital already in existence has forty beds.)

The total number of beds for the tuberculous in the State to-day is, therefore, 3553.

DISPENSARIES.

To provide proper care for those cases that are not in hospitals the State requires

National Winners in the Red Cross Seal Pennant Competition

Beautiful silk banners, awarded jointly by the American Red Cross and the National Association have been presented to the associations and agents for the following territories as the victors in the 1915 competition to sell the most seals per capita of population. A formal presentation to winners was made at the annual meeting of the National Association in Washington by Major-General Arthur Murray, representing the American Red Cross.

TABLE I—WINNERS IN INTER-STATE COMPETITION

Classes	Limiting populations		1915 Population†	No. seals sold per capita
A	102,730 to 1,250,000	1st Place, Rhode Island	602,765	2.29
B	1,250,000 to 2,400,000	2nd " Connecticut	1,223,583	2.07
C	2,400,000 upwards	1st " Minnesota	2,246,761	1.34
		2nd " Maryland	1,351,941	.72
		1st " New York	10,086,568	1.80
		2nd " Wisconsin	2,473,533	1.46

TABLE II—WINNERS IN INTER-CITY AND -TOWN COMPETITION

Classes	Limiting populations		1915 Population†	No. seals sold per capita
1.	300 to 600	1st Place, Kimballton, Ia.	300	18.333
2.	600 to 1,200	2nd " Philip, S. D.	578	15.138
3.	1,200 to 2,000	1st " Hershey, Pa.	812	29.044
4.	2,000 to 8,000	2nd " Garden City, N. Y.*	1,250	21.936
5.	8,000 to 25,000	1st " Gilman, Ill.	1,233	12.165
6.	25,000 to 50,000	2nd " Lawrence, N. Y.	1,521	8.966
7.	50,000 to 150,000	1st " Sewickley, Pa.*	4,959	20.165
8.	150,000 to 500,000	2nd " Bronxville, N. Y.	2,012	19.440
9.	500,000 to 1,000,000	1st " Ithaca, N. Y.	15,679	8.120
10.	1,000,000 upwards	2nd " Corning, N. Y.	15,136	6.858
		1st " Elmira, N. Y.	37,968	7.537
		2nd " Charleston, W. Va.*	28,822	5.062
		1st " Troy, N. Y.*	77,738	4.832
		2nd " Ft. Wayne, Ind.	74,352	4.724
		1st " Rochester, N. Y.*	250,747	4.386
		2nd " Buffalo, N. Y.	461,335	3.950
		1st " Pittsburgh, Pa.*	571,984	2.798
		2nd " Cleveland, O.	656,975	1.602
		1st " Brooklyn, N. Y.	2,234,221	2.037
		2nd " Chicago, Ill.	2,447,045	1.256

* Winner of pennants in 1914.

† The populations considered and listed here are the U. S. Census estimates for 1915.

cities and towns of 10,000 inhabitants or over to maintain a tuberculosis dispensary. The State Department of Health sets the standards for these dispensaries, each of which, according to the Department's regulations, must have a visiting nurse. It is gratifying to note that all of the fifty-four cities and towns of this size have opened such dispensaries. The next step should be to furnish dispensary service for communities under 10,000 inhabitants, a result which can, perhaps, be best attained in connection with the new county hospitals.

AFTER-CARE.

As a step toward rounding out and completing this State-wide system of caring for victims of tuberculosis the Trustees of Hospitals for Consumptives employ an

after-care worker who follows up patients discharged from the State hospitals, while the State Department of Health maintains eight State district health officers, a part of whose work is to study tuberculosis conditions in their own territory and give advice to the local health boards. If these physicians could have the services of a nurse assistant the present system would be still more complete.

It should be said in conclusion that no attempt has been made in this statement to present an outline of the educational work being done by many organizations all over the State.

While at some points the Massachusetts plan could no doubt be strengthened, it can be readily seen that an excellent foundation has been laid for efficient work in the future.

Query Column

This department of the Bulletin began with the June, 1916, issue. It is designed to be a monthly feature to answer your questions. Its success depends upon the use which you make of it. Therefore send in your questions. Read the other questions published and let the thousands of other anti-tuberculosis workers have the results of your experience.

Do you advise paying for publicity space?

Yes, especially when you cannot get free space in the news columns. There are other occasions also when money spent for advertising space in newspapers and magazines is well invested. Since the Red Cross Seal Campaign is already under way, the remarks of E. A. Moree on this subject at the North Atlantic Tuberculosis Conference in 1914 are worth repeating. Mr. Moree was formerly with the State Charities Aid Association and is now with the American Red Cross. He is an expert on publicity and is the author of a series of articles on "Public Health Publicity," now running in the *American Journal of Public Health*. At the 1914 conference he said:

"As a newspaper man, it has always seemed strange to me that social workers expect to pay rent for their offices, expect to pay the printer for printing their letter heads and pamphlets, expect to pay for the paste and the pens and the ink they use, but seldom expect to pay for the publicity they obtain. This publicity they will admit is the life of their work, but they fail to see that the newspaper can assist as it sells its display advertising space. They fail to see that space in a newspaper is as much of a marketable commodity as envelopes, paste and typewriters. . . . I am firmly convinced that the use of paid newspaper space by philanthropic agencies is sound business. I cannot see where there is any fundamental difference between presenting the merits of the Association for Improving the Condition of the Poor or the Charity Organization Society or the work of a local tuberculosis committee to prospective contributors through display space in the newspaper from presenting the merits of a carpet-sweeper or a new brand of silk to prospective purchasers through the same medium. . . . It may be that the newspapers of your community wish to contribute to your work. I believe, however, that the proposition of buying space in your newspapers should be made to the papers. If they decide that they wish to contribute that amount, I believe that the newspaper should receive the same credit for contributions that you give to other contributors. In your annual reports you will give long lists of ladies who have contributed clothing, jellies and what not to the patients cared for by your nurse. Did it ever occur to you that a newspaper man might like to see his name in the list as contributing column after column to your cause in presenting its merits to your community?"

"As a social worker—aye, even as a press agent—I believe that your work will profit tremendously by at least offering to pay for display space in your newspapers. If your newspaper editor or business manager decided that the paper wishes to make a contribution to your seal campaign it is no more than right that

this fact should be noted in the advertisement itself and in your report of the seal campaign.

"Many committees are using display space as a contribution from merchants who make a yearly contract, usually for a certain amount of space in all of the newspapers in their territory. Frequently merchants will devote a portion of their advertisement to the Red Cross Seal Campaign.

"In presenting this matter to your merchants, you might quote the fact that John Wanamaker in New York City devotes a considerable portion of his page advertisement to the Red Cross Campaign for funds for use in the European wars. In presenting the case to your newspaper editor, after, of course, offering your advertisement to him as paid space, you might mention the fact that many of the leading magazines of the country are contributing quarter, half and full pages to the National Association as display advertising in the National Red Cross Seal Campaign.

"To sum up: Remember always that the newspapers will give you what you pay for. If you do not like to pay for advertising space, at least try to pay for the use of the paper's news columns by giving it news to print. Get a newspaper man to prepare your copy. Get an advertising man to prepare your advertising copy. Work of this kind has developed into the new science of publicity. It would be just as reasonable for you to employ a layman in your dispensary or as superintendent of your hospital or as one of your staff of nurses as to depend upon the layman to present your case to the newspapers."

In your opinion should tuberculosis associations provide relief for its patients outside of the medical question?

Should anti-tuberculosis associations dispense relief (milk, eggs, clothing, etc.) to tuberculosis patients if there already exists in the community a regular relief society?

The answer to both these questions is that relief work should not be given by the tuberculosis society if there is another agency which can do it adequately. You will find an interesting article in the May, 1915, issue of the *Bulletin* on "Relief of Tuberculosis Families," by A. W. McDougall.

Should tuberculosis committees work for health insurance?

Yes, doubtless most if not all anti-tuberculosis workers believe in the principle of health insurance whether or not they favor certain legislative bills on the subject. All workers are urged to familiarize themselves with the problem because it is certain to be up for attention before many State legislatures during the next few years. A copy of the suggested bill drafted by the American Association for Labor Legislation may be obtained by writing to John B. Andrews, Secretary

of the Association, 131 East 23d Street, New York City.

What line of procedure would you follow when the doctors of a community where a nurse is being maintained use the clinic at the dispensary to secure private patients; one doctor diagnosing a case as tuberculosis and the next doctor in turn saying, "Nothing but a little inflammation. Come around to my office and I will give you a tonic that will fix you all right."

Report the matter to the County Medical Society if you have definite information.

Is the county or the city the logical health unit?

It depends on the population of the city and of the county, the size of the county and many other conditions which make an answer impossible except in regard to specific cities and counties. In sparsely settled communities even a single county may prove too small a unit and two or more counties can profitably combine to increase the strength and efficiency of the work. See excellent presentation of this subject from different points of view in Transactions of Eleventh Annual Meeting (1915) National Association for the Study and Prevention of Tuberculosis, page 269.

Do you favor merging the anti-tuberculosis work with a general public health movement?

In general we would say No. There may be communities in which such a merger would increase the value of the anti-tuberculosis work, but the opposite has usually been found to be true. Anti-tuberculosis work should receive recognition as an effort to solve the leading health problem of the present day. Accordingly it merits the strongest possible support and if a merger with other health movements is going to weaken that support, such a merger ought not to be attempted.

Should philanthropists be encouraged to build, equip and endow tuberculosis sanatoria and hospitals or should all such institutions be built up by public funds?

The National Association believes that it is the duty of a State, county or city to build and maintain tuberculosis sanatoria and hospitals. Sometimes the public authorities cannot be convinced of their duty without a demonstration of what a tuberculosis sanatorium or hospital means to a community. In such a situation an anti-tuberculosis association may find it necessary to provide an institution and of course contributions both from "philanthropists" and from those who do not give large enough amounts to be thus characterized ought to be welcomed and encouraged. After the institution is built, however, the association should continue its efforts to obtain public support for it.

In most communities, even where public institutions are being maintained, the number of beds available is insufficient to care for all tuberculosis cases needing hospital treatment. Private contributions to supply additional beds should be welcomed, but it should always be borne in mind that \$100 spent in getting the community to spend \$10,000 is far better business than \$100 put into the care of so many beds in private philanthropy.

Medical Notes, Abstracts and Reviews

The object of this monthly department of the "Bulletin" is to put physicians in easy touch with medical and scientific literature, both American and foreign, including magazine articles, books, reports, etc., that bear directly or indirectly upon the treatment and prevention of tuberculosis. This is not a department for news and editorial comment. Its function is rather that of a catalogue or a librarian. Any material for this department of the "Bulletin" should be sent to Dr. George Mannheimer, at West 53rd Street, New York, who has been chosen medical editor.

Readers of the "Bulletin" who wish to have copies of the publication sent to physicians working in dispensaries, sanatoria, laboratories, and in other forms of tuberculosis activities, who are not now receiving it, should send in such lists of names to the National Association. The "Bulletin" is sent free to those who are engaged in anti-tuberculosis work.

Workmen's Compensation and Tb.—The New York workmen's compensation law provides for compensation for "accidental injuries arising out of and in the course of employment and such disease or infection as may naturally and unavoidably result therefrom." A workman in the State of New York jumped into a river to save himself when a timber broke. He "contracted a heavy cold and pleurisy, which developed into Tb."

The New York Industrial Commission awarded compensation to the workman, and the State supreme court affirmed the award.

The opinion is published in this issue of the Public Health Reports, page 1719. —Public Health Reports, June 30, 1916.

Corrective Exercises as a Preventive of Tb.—The class for corrective exercises for the children of the Harlem Italian Clinic held its annual "tournament" in the pavilion of the Thomas Jefferson Park, 114th Street and East River.

Under the direction of Miss Glimm, eighty children, divided into divisions for boys, girls and the "baby class" took part, each earnestly striving to win one of the prizes which at the conclusion of the exercises were to be awarded to the successful competitors.

Much credit is due to the Society for the Prevention and Relief of Tuberculosis, whose generosity has made it possible to maintain this important branch of Tb. preventive work. As a means of increasing bodily resistance and so acting as an effective preventive measure against Tb. and other diseases, these exercises have been deemed of very great value by those who have given the subject careful study.

It is very much to be hoped that this valuable adjunct to the successful control of Tb. will be more widely adopted. —Weekly Bulletin of the N. Y. City Dept. of Health, June 17, 1916.

Tubercle Bacilli in the Blood with Bone and Joint Tb.—Paus presents evidence which confirms anew that the bearer of a tb. focus is liable any day to have it spread by passage of the bacilli into the blood and setting up of new foci. His research confirms the clinical importance for Tb. in adult life of the bone and gland lesions in children. Tb. can lie latent through years and decades, but a focus once established always bears in itself the possibility of further spread of the disease when circumstances rouse it to flare up anew. The article is based on repeated examination of the blood from 50 patients with bone or joint Tb. Inoculation of animals he regards as the most reliable means for testing the blood, but only 6 gave a positive result. Tubercle bacilli were never found but on one occasion in these 6 cases; the blood was sterile at all other times. The positive findings were generally early in the disease and in the more acute types. Only one

of the 6 positive patients was well nourished; the others were debilitated. The positive findings were about equally divided between the febrile and afebrile cases. In 9 cases the blood was examined during or soon after tuberculin treatment, but no tubercle bacilli were found. In 4 of the 6 positive cases there were signs of renal Tb. along with the tb. bone processes. This combination is more than casual coincidence. In his last 15 operative cases of kidney Tb. there was a history of bone processes in 3. Multiple foci were common, especially in the skin, various bones or joints, tendon sheaths, bronchial or other glands, intestines and meninges, and air passages. The discovery of tubercle bacilli in the blood has no appreciable import for diagnosis, prognosis or treatment except in so far as it reaffirms the necessity for regarding Tb. as always more than a mere local affection. Extermination of each focus, however, reduces the danger by just that much.—*Om tuberkelbacillens ovcogangi blodet ved ben-og ledtuberkulose (Passage of Tubercle Bacilli into the Blood with Bone and Joint Tuberculosis)*, N. Paus, Norsk Magazin for Lægevidenskaben, Christiania, May, 1916.

Food and Fuel Value in Tb.—A study at the New York City Municipal Sanatorium at Otisville, having in view both the economic and hygienic side of the food question, led among others to the following conclusions: The elimination of meats and eggs from the morning meal, and the substitution of milk, is a sound and justifiable economy. The dietary of the tb. should be high in caloric value, but confined to three daily meals in all but exceptional cases. Males consume more food, both in calories per pound of body weight, and in total amount, but females make larger gains in weight. The avoidance of frequent repetition of foodstuffs is important. A four-weeks menu used as follows is a great aid: For the first four weeks of operation the menu starts with the first week and ends with the fourth; for the second four weeks it starts with the second and ends with the first, and so on. This makes it almost impossible for the patients to surmise what food is to be served at any time. Two vegetables, besides potatoes, are served for dinner and supper. It is good judgment to stop for a while any particular combination the patients begin to tire of. The treatment of small children, in separate units, in institutions with adults, is both feasible and advantageous in that it results in economy of foodstuffs. Small initial servings with as many "seconds" as may be desired are satisfactory to the patients and prevent much plate waste. The plate waste in institutions for the tb. is of necessity higher than in hospitals for the insane or in general hospitals.—*A Study on Food and the Fuel Value of the Dietary at the New York City Municipal Sanatorium*, R. J. Wilson and W. L. Rathbun, Jour. Amer. Med. Assoc., June 3, 1916.

Tuberculin in Tb. of Larynx.—Tbc. laryngitis is a localized lesion, probably always an autoinfection and chronic, because a certain amount of resistance has been established. In Southern California the author's incidence of laryngeal Tb. is 2.1%. He never saw a case in children.

He quotes Bandler and Roopeck, who claim never to have seen tbc. laryngitis develop in patients who have been treated with tuberculin. To controvert this he presents two cases of his own. The first, a patient who had had tuberculin for a year before coming to the author, developed typical tbc. lesions of the epiglottis, cord and interarytenoid space. The second developed tbc. laryngitis while getting tuberculin in a sanatorium under the author's care.

As to tuberculin therapy in Tb. of the larynx, much depends upon the pulmonary condition. Advanced lesions contraindicate its use.

He reports eight cases in which he used tuberculin. Five of them are living. Two have been healed for over two years. Two cases are improved, that is, the lesions are quiescent, and the patients are at work. One case is still under treatment. Three of the eight are dead. In none of them was the laryngeal lesion an important factor in the outcome. All of the cases were in the second or third stage.

Though the number of cases is small, the results are such that some hope of benefit in the treatment of tbc. laryngitis can be expected.—*Tuberculosis of the Larynx with Special Reference to the Use of Tuberculin*, Hill Hastings, Laryngoscope, May, 1916.

Symposium on Tb.—1.—Does the infection depend rather on the virulence of the organism or on the susceptibility of the patient? 2.—Has any medicinal treatment any direct action on the disease? 3.—What is the therapeutic action of germ derivatives? The following answers were given to a questionnaire instituted by the Buffalo Med. Jour.

V. Y. Bowditch, Boston: The weight of evidence seems to be in favor of the susceptibility of the subject rather than the virulence of the organism. There is no medical treatment except tuberculin, used in carefully selected cases, and in proper doses in patients who can be constantly watched.

L. S. Peters, Albuquerque, N. M.: The susceptibility of the patient is more important than the virulence of the organism. Aside from drugs for relief of symptoms, hypodermic use of iron arsenite and strychnine are indirectly of benefit. Any tuberculin or serum to be of value must contain the living tubercle bacilli.

E. R. Baldwin, Saranac Lake, N. Y.: In some cases virulence of the bacillus has much to do with the fact that the patient does not resist. All human beings are susceptible to the bacillus when it is planted in the right place, but the secret of tissue resistance is as yet unsolved.

Tuberculin is of value in cases without fever, in skin and gland Tb., but its use has to be made with much discrimination.

L. Brown, Saranac Lake, N. Y.: Both the organism and the susceptibility of the patient are important factors. A few cases benefit wonderfully under the use of tuberculin, while the vast majority do not.

G. T. Palmer, Springfield, Ill.: The susceptibility of the patient is by far a greater factor than the virulence of the organism. The only remedy, and only in cases which show no activity, is tuberculin. In the sanatorium cases no results could be noticed, while the ambulatory cases are often markedly benefited. Tuberculin should not be used as a routine.

H. B. Jacobs, Baltimore: The individual's susceptibility is no doubt of greater importance. Tuberculin in a small number of cases not only hastens recovery, but insures more permanent results.

L. B. McBrayer, Sanatorium of N. C.: The removing of foci of infection is all-important. Certainly, non-virulent bacilli will not produce Tb. while long-continued exposure to the ordinary forms will produce it in old as well as young. Germ derivatives have not proved of any value.

C. L. Minor, Asheville, N. C.: If we could keep up the vitality of our submerged tenth, who are the chief victims of this disease, we would see a great decrease in Tb. Moreover, we cannot control the virulence of the organisms. There is no specific for the disease, but a small number do remarkably well under tuberculin.

M. P. Ravenel, Columbia, Mo.: While both the virulence of the organism and the susceptibility of the subject are important factors, we can do much practical good by building up the resistance or immunity of the individual. The only medical treatment of value is tuberculin, which should only be used in the absence of contraindications.

F. M. Pottenger, Monrovia, Cal.: There is no doubt that constitutional susceptibility does play a part in infection, but its nature cannot, as yet, even be guessed at. The same is true of local susceptibility. Everything done for the cure of Tb. is indirect, whether this consist of hygienic measures, tonics or the bacillus derivatives. They are all important aids in treatment. If it were possible to give to the body cells the entire tubercle bacillus in solution or in a manner that it could be utilized exactly in the same proportion that it is found in the bacillus itself, we would come nearer to obtaining a specific result.

J. P. Crozier Griffith, Phila.: Efforts should be made to prevent infection while local irritation causing susceptibility should be removed. The value of bacillus derivatives is doubtful.

Symposium on Tuberculosis, Buffalo Med. Jour., June, 1916.

Gangrene of the Lung Following Artificial Pneumothorax.—A man, aged 41, American, with advanced active Tb. involving the greater part of the left lung and probably the upper part of right, has artificial pneumothorax performed with the hope of controlling the advancing process. Seven injections of nitrogen gas were given without any improvement.

Nine days after the last injection he suddenly raised a large amount of exceedingly foul greenish sputum, which showed, on examination, to contain mostly pus, numerous acid-fast bacilli, oidium albicans, staphylococcus pyogenes aureus, and a Gram-negative bacillus which produced gas smelling like methane. Such sputum was raised daily for three weeks, and became gradually chocolate-colored and watery, when the patient died.

Autopsy showed a few scattered fresh tubercles on the surface of the liver, slightly enlarged, partly caseous mesenteric lymphnodes, and the following changes in the thorax: The heart was pushed over almost to the mid-line, the left lung was collapsed and lay against the vertebral column and mediastinum. The pleural cavity contained about one liter of brown, foul-smelling fluid. The collapsed left lung was gray-green in color and "mushy." There were adhesions between the apex and the parietes and between the base and the diaphragm. Five large cavities opened into the pleural cavity, with shreds of gangrenous lung tissue protruding through the openings. The parietal pleura was 2 to 3 mm. thick, the visceral was dense and both were grayish-green in color and covered with slimy exudate. The lung tissue, seen through the openings, is everywhere sponge-like and grayish-green. A section through the apex showed areas of caseation, consolidation, and mottling. The right lung showed tubercles and dense tbc. areas, adhesions at the apex and a roughened, lustreless pleura. There was no occlusion of bronchi or of vessels entering the lung.

Although no case of gangrene of the lung following artificial pneumothorax has thus far been reported in the literature, it would appear in this instance that the collapsing of the lung was the immediate exciting cause. The following sequence of events might have occurred:

To begin with, there was a rapidly disintegrating lung with superficial cavities, and more or less extensive necrosis of lung tissue due to obliterative endarteritis. The collapse of the lung caused a limitation of the blood supply, aiding in the necrosis. Putrefaction then took place through the action of putrefactive organisms present in the tbc. lung and gangrene supervened in the necrotic areas. Rupture of the lung then followed and the pleural fluid became putrid and corroding.—*Gangrene of the Lung Following Artificial Pneumothorax, E. N. Packard, Jr., Amer. Jour. Med. Sciences, June, 1916.*

Laryngeal Tb.—Early diagnosis of laryngeal Tb. ranks second in importance to that of pulmonary Tb. Routine examinations of the larynx of tbc. patients should be made without waiting for symptoms. A sense of tickling or fullness and hoarseness may occur very early, but pain is not usually an early symptom. The pain on swallowing only occurs in lesions of the upper larynx. The signs are more important than symptoms. Any localized redness or swelling in the larynx of a tbc. patient, particularly on one vocal cord or posterior commissure, suggests tbc. involvement. Typical findings are the pear-shaped swelling of the arytenoids, sometimes pale instead of red, infiltration of the vocal bands, a mammillated hyper-

plasia at the base of the vocal process and a persistent localized or general infiltration or ulcer on the epiglottis. The prevention of tbc. laryngitis is based largely upon proper care of the nose, sinuses and throat; restoration of nasal breathing, removal of sinus affections and diseased tonsils. In addition to proper hygiene and the use of tuberculin local measures, such as the use of lactic acid and formalin, are of great value. The former, from 20 to 75 per cent., applied on a curved cotton applicator, is useful in the ulcerative form. Formalin, from 2 to 10 per cent., applied in solution, is used for any form. Argylol, in 25 per cent., is useful in some cases. Complete rest to the larynx is of course essential. For the pain orthoform lozenges and the injection of about 20 drops of 75 per cent. alcohol with 1 per cent. novocain into the internal laryngeal nerve have proved very efficacious. In lesions of the epiglottis, however, the latter measure is not of much value. One patient could feed himself through the stomach tube. Removal of the epiglottis when it is the site of painful ulceration is free from danger and very beneficial. The removal of ulcers by means of the curette and especially the cautery, yields often very good results. The prognosis of laryngeal Tb. is far less serious than it was formerly considered to be.—*Laryngeal Tuberculosis, J. B. Greene, Southern Med. Jour., Nov., 1915.*

Immunity in Tb.—A consummation devoutly to be wished is the discovery of some method by means of which the human race may acquire immunity to Tb.; such immunity, if obtained, would indeed be one of the greatest advances of medical knowledge. For many centuries there has been a struggle between humanity and the tubercle bacillus, the one trying to acquire a resistance, the other a virulence sufficient to overwhelm its victims. The scales have gone up and down many times, but for some years past the ravages of the bacillus have become distinctly less. For that reason now is a most opportune time to make further attempts to control this affliction, and the attempts must be made along other paths than those of hygiene. Much can be and has been done in that way, but alone it cannot win the struggle. There must be found some method by which the individual can be protected.

Unfortunately, Tb. appears to be one of those infections that do not confer a high degree of immunity. Although indications of this disease have been found in the bones of Egyptian mummies of 3500 B.C., yet no inherited immunity has developed. We are still fighting for our lives and must so continue. Inasmuch as there seems to be little if any natural immunity, the greatest amount of work has been directed along the line of artificial immunization, but as yet without satisfactory results.

The majority of the infectious fevers can be controlled or modified by the injection of the dead bodies of the invading organisms with their subsequent absorption. In Tb. similar attempts have been made, but with little encouragement, as the waxy structure of the bacillus interferes with its absorption.

As a result of the unsuccessful employment of dead bacilli, it seems, as Koch

remarked, that the only chance lies in the employment of living tubercle bacilli. This is, of course, fraught with more or less danger, but it is in this direction that the advance must be made.

It is evident, however, that the older people become the less likely they are to be infected with Tb. It is also well known that the great majority of people have been infected at some time by Tb., but have overcome the infection; it seems, therefore, that an infection may produce an immunity of some degree.

As it is in childhood that the greatest susceptibility exists, so during that age our greatest efforts must be exerted. If we can vaccinate successfully, or, in other words, increase, even to a slight degree, immunity in childhood, there will be less infection then and fewer cases in later life.—*Editorial, N. Y. Med. Jour., July 1, 1916.*

Treatment of Tb. at the Seashore.—

During the first ten years of its existence, the Sea Breeze Hospital at Coney Island has treated 262 cases. Of these 38 died; 9 were removed by parents after a few days of their stay in the hospital; 7 were discharged as non-tbc.; 123 were discharged with disease arrested, 10 as improved, and 43 are still in the hospital. Among the children admitted were some in advanced stages of the disease, with amyloid degeneration and even one moribund. There were 24 deaths among the first 100 patients admitted; 4 died of pulmonary Tb., 18 of amyloid degeneration, and one of sarcoma (not tbc.). Among the remaining 162 cases there were only 14 deaths; 2 of general miliary Tb., 2 of meningitis, 3 of pulmonary Tb., 3 of amyloid degeneration, and 4 which had been discharged cured died of scarlet fever, measles, diphtheria, and 1 of accident. Of the cases discharged as arrested, 17 had involvement of glands; 26, spine; 22, hip; 18, knee; 7, ankle; 2, shoulder; 4, elbow; 1, jaw; 2, finger; 2, hand, and 22 more than one joint. Of the 10 cases discharged improved, 4 were glands; 2, hips; 1, knee; 1, ankle, and 2 had more than one joint involved. Forty-nine of those discharged cured had discharging sinuses on admission; 2 of those discharged improved. They all remain healed at the present time. During the winter the schooling supplied by the Board of Education was conducted in rooms in which the windows were wide open. The children improved markedly in every instance. The sinuses were found to heal best under the influence of sea-bathing and heliotherapy. Cases to be allowed to bathe have the joints treated by braces instead of plaster. The braces may be coated with rubber to avoid the necessity of removing them before bathing. Exposure to the sunlight also has a beneficial effect upon the sinuses, but this can only be practised during the warm summer months, as the children do not stand well exposure to winds, and some become restless when exposed to sunlight in humid days. Psoas abscesses have been treated by recumbency, with the result that absorption takes place in some. When the abscess becomes large it may either be aspirated and Calot fluid injected, or it is incised, the pus gently expressed, and the wound sutured under the strictest aseptic precautions. The latter method has seemed the most satisfactory. In the

treatment of spine Tb. the use of the bone graft has given better results than the plastic operation.

Pulmonary cases are not admitted, as they do not do well at the seashore. If lung signs develop while in the hospital the patient is discharged.—*A Review of the Ten Years' Work at Sea Breeze Hospital for Surgical Tuberculosis, B. H. Whitbeck, The Amer. Jour. of Orthopedic Surgery, March, 1916.*

X-Ray Control in Therapeutic Pneumothorax.—Roentgenoscopy and Roentgenography are both to be employed in the artificial pneumothorax treatment of Tb. The Roentgen-ray study is made at three periods: 1.—The preliminary examination for the estimation of the amount of disease and the selection of the site for the puncture. 2.—The examination during and after the injection. 3.—The subsequent study with the determination of the amount of collapse, restitution, condition of the lung, condition of the pleura, displacement of the heart, and mediastinal contents, position and movement of the diaphragm, presence or absence of subcutaneous emphysema and the effect on the disease. These studies are made from time to time and compared.—*Roentgenographic Control of the Pneumothorax Treatment of Pulmonary Tuberculosis, I. S. Hirsch, Med. Record, June 10, 1916.*

Treatment of tbc. and Other Chronic Infected Sinuses.—Six cases of sinuses were treated by the direct application of a specially prepared ionized gas. Three of these were tbc. The sinuses heal nicely after a series of treatments. Healing of wounds is not retarded by the gas. The gas is prepared by passing air over rectified spirits of rosin and subjecting it to the action of an electric arc of sufficiently high voltage. This gas has strong germicidal properties and is not irritant. If allowed to age, the gas becomes slightly irritant when inhaled. The germicidal action is increased by passing the gas through a ten-gallon glass container which fills and empties in one-half minute. Germicidal action is complete after exposure for twenty minutes to the fresh gas, and for three to five minutes to the aged product.—*A New Method of Treating Tuberculosis and Other Chronic Infected Sinuses. A Preliminary Report, W. C. Sweek, Interstate Med. Jour., March, 1916.*

Progress in Therapeutics of Tb.—During the year 1915 there has been no addition to our knowledge of bacterio-immuno therapy. Deyke and Much believe that the tbc. individual produces antibodies against various parts of the tubercle bacillus, such as the fat of the capsule and the different proteids of the bacillary body. They split the bacilli into component parts, which they call partial antigens. They find out which antibodies are lacking in the body by means of complement fixation or intracutaneous tests with these antigens. They then attempt to stimulate these absent antibodies by subcutaneous injections of the respective antigens. Some good results have been reported. As regards tuberculin, it is still considered an adjunct, but not a cure. Marmoreck and Maragliano still recommend passive immunity

by the use of serum obtained from immunized animals.

In the line of chemotherapy copper is still advocated by some, especially the lecithin combinations. The latest conclusion is that its use is not justifiable. Some benefit has been reported after the use of gold compounds in the treatment of tbc. laryngitis.

Heliotherapy is one field which is being more and more extensively explored. Rollier reported 1,129 cases of surgical Tb. treated at Leysin in the Swiss Alps. Of these 945 were cured, and 112 improved. Other good results have been obtained in England, Denmark, and in this country, in Colorado, Perrysburg, N. Y., and Sea Breeze, Coney Island. Pottenger is not very enthusiastic over the use of heliotherapy in pulmonary Tb.

Marked improvement has been obtained after the use of the X-ray. Cures have been reported in early cases and improvement in tbc. third stage. It has been shown that radium rays diminish the virulence of the tubercle bacillus.

Finally, artificial pneumothorax has had an extensive trial. Sachs's statistics of 1,145 cases show durable result in 31.7 per cent. He places the percentage of cures at 12 per cent., while it offers a chance to the advanced case.—*Therapeutic Measures for Tuberculosis suggested during 1915, E. N. Packard, Jr., Interstate Med. Jour., March, 1916.*

Mortality from Tb. in Holland.—The figures cited are from Rotterdam during the twelve years ending with 1914. They show a reduction of 19 per cent. in the death rate for women, but this is slight in comparison to the reduction of 48 per cent. in the death rate for men of the corresponding age, between 20 and 50. This great reduction is the expression in figures mainly of the consequences of improved hygiene in workshops, etc., introduced of late years by private initiative or legislation. Improved and extended facilities for systematic treatment have co-operated in the general reduction in the death rate from Tb., but hygiene in the trades has undoubtedly been the main factor. The decline has been for males of all ages from 210.1 per 100,000 living to 143.3 and for females of all ages from 176.9 to 137.2.

—*Sterfte van tuberculose Rotterdam over de jaren 1902-1914. J. Sanders, Nederlandsche Tijdschrift van Geneeskunde, June 3, 1916.*

Work in Systematic Treatment of Pulmonary Tb.—Results obtained at the Hauteville Sanatorium during 1914 with the systematic application of the principle of intermittent auto-inoculation by means of graduated muscular exercise. The patients were all men and the complete course took six weeks at least. The first grade of the course, after a two weeks' rest, was a daily walk. The last grade included road-making with shovel or pick-axe, supplemented by a gentler exercise with outdoor bowling. The work is graduated according to the answer to the question, "Is the exacerbation approaching its close or is it terminated?" Any developing *poussée* is a contra-indication to exercise. The thermometer is the principal criterion, but this alone is not enough. The physiologic condition as a whole must be regarded, and the debilitated, with unstable heart action, should

be excluded from this method of treatment. Patterson is guided by the temperature, the quantity and quality of the expectoration, the weight, fluctuations in the appetite, subjective sensations of the worker, and the opsonic index. Dumarest is guided more by the auscultation findings. Headache, anorexia or fever must be regarded as evidence of excessive auto-inoculation and call for a halt at once. Actual hemoptysis was never observed and Patterson states that it has never occurred at his sanatorium during this "work cure." The subjective benefit from being allowed to exercise is an important factor in the results. Appetite and sleep return. Experiences at Hauteville indicate that a rise of one degree Centigrade is the limit for a salutary reaction. Another law that has been worked out from the experiences reported is that the temperature reaction is not necessarily proportional to the severity of the pulmonary lesions. This negative law illustrates the difficulties of the problems that have to be met in carrying out a systematic work cure. The physician undertaking it must give his whole time to it; he must live with his patients. Without this constant surveillance of the minutest details and at every minute, the method is liable to do harm.—*Du travail musculaire systématique comme traitement de la tuberculose pulmonaire*—H. Hamant and C. Colbert, *Jour. de Médecine de Bordeaux*, June, 1916.

Right Heart in Extensive Pulmonary Disease.—Poynton cites two cases, one of chronic pulmonary Tb. and a second of extensive pulmonary sclerosis and bronchiolectasis, in which the pulmonary condition had fallen into the background and a series of symptoms, apparently cardiac, had become predominant. Dyspnea had increased; a very striking lividity of the whole integument, and notably of the face and extremities, had become permanent; dropsy and ascites had attained a high grade, and the liver in both cases was greatly enlarged. Venous engorgement was conspicuous, but the pulses—a point of importance—though strikingly rapid (120 to 140 per minute) were not arrhythmic; and the quantity of urine passed was considerable. These, together with the tricuspid systolic murmur, were the features which attracted attention and made it clear that some very definite change had taken place in the course of these illnesses. Radiographic examination showed that the enlargement of the heart was symmetrical, owing to the disproportionate size of the right side. The outline is not so circular, as in failure the result of mitral disease and the transverse measurement is not so great. The left border of the outline is not so circular as in mitral disease with failure of compensation, but makes an obtuse angle, the apex of which is formed by the junction of the upper limb constituted by the left ventricle with the lower formed by the right ventricle. The writer thinks these facts should be borne in mind in connection with the progress in thoracic surgery in recent years, especially the possibility in performing artificial pneumothorax that, in putting out of action a considerable portion of functioning lung which disturbs the balance of pulmonary circulation and throws considerable strain on the right ventricle, the reserve power in weakly subjects may be

rudely shaken and secondary heart failure encouraged.—*Failure of the right side of the heart as a result of extensive pulmonary disease.* F. J. Poynton, *Lancet*, June 17, 1916.

Serologic Diagnosis of Tb.—Datta devotes six pages to parallel tabulation of the findings in 60 Tb. patients with the skin tuberculin reaction, agglutination and precipitin tests, and fixation of complement by two different techniques. Most of the patients had pulmonary Tb., but a few had Tb. meningitis, Addison's disease, or polyserositis. The tuberculin reaction was the most constant of all the tests in pulmonary Tb., except in the most advanced cases. The fixation of complement reaction came next in order of frequency, and was most constant in the graver cases. This renders it useful in prognosis. The agglutinin and precipitin tests never gave independent positive findings, but trailed the others, giving positive findings in the milder cases, the precipitin reaction occurring a little more frequently than the other. In diagnosis, therefore, and in prognosis, especially in pulmonary Tb., he advises applying both the skin tuberculin test and the complement fixation test, with possibly the precipitin reaction as a subsidiary test.—*Ricerche serologiche nella tubercolosi*, L. Datta, *Poeticlinico*, July 9, 1916.

Postural Treatment of Pulmonary Tb.—Different anatomic types exist; each type has its own more or less definite potential of disease, and of these the congenital viscerotonic, the carnivorous, the hyperonto-morph, is commonly Tb. This type, during development, acquires habits of carriage in which the ribs are lowered and the chest is used in the position of full expiration. In this position, thoracic breathing must be very imperfect and full expansion of the chest rarely occurs. The writer describes several defective anatomical types, and shows how they interfere with the mechanism of breathing and the function of the heart. From these he draws the practical suggestion that if we are to do the best we can to insure health we must see that the body is so used that the rhythm of respiration, both as it refers to the thoracic and the diaphragmatic movement, is as nearly normal as possible. With the facts thus brought out, the use of a back brace for a case of pulmonary Tb. may seem unusual, but is not irrational. In the treatment of Tb. patients the importance of posture must be borne in mind at all times, and particularly as the patients are put out in the open to get the fresh air. If improperly propped up in bed, obviously little air can get in to the individual, and this is also true of some of the reclining chairs which are used in our sanatoria, especially the canvas steamer-chair. If such chairs are used, their harmful features should be appreciated and corrected. The simple use of a board placed at the back of a canvas steamer-chair makes the chair much less objectionable. The aim in treating these patients should be to make the full excursion of the chest in inspiration and expiration possible with the least effort.—*Anatomic form and posture important factors in the treatment of pulmonary tuberculosis*, J. E. Goldthwait, *Boston, Med. & Surg. Jour.*, July 20, 1916.

Family History in Life Insurance.—With a family history showing one or more cases of Tb., light-weights at the younger ages at entry show a high mortality—usually the lighter the weight the higher the mortality. For applicants entering at the middle-age period, the family record has little or no influence. For entrants at 45 or over, mortality is better than standard, except for heavy-weights, when it becomes unfavorable. Finally, the Mortality Investigation Tables have demonstrated that among young people who are light-weight and have a Tb. family history, insurance cannot safely be written under ordinary contracts; and further, since the extra mortality among these young light-weights occurs in the earlier policy years, the problem cannot be met by granting them short-term or endowment policies; only an extra premium charge or rating up will logically meet the requirement.—*Consumptive family history in life insurance*, J. L. Davis, *Texas Med. News*, July, 1916.

Tb. and Erythema Nodosum.—The complaisance with which physicians used to regard erythema nodosum has been somewhat shattered in the last ten years. Evidence is accumulating that associated or subsequent tuberculous lesions are not the casual coincidence formerly supposed, but bear a casual relation to the skin disease. Uffelmann suggested a clinical relation between them years ago, and Hildebrandt induced tuberculosis in guinea-pigs by inoculating with scraps from the erythematous nodes. Chaudard found a typical erythematous node develop at the point of injection of tuberculin in a tuberculous girl. Landouzy discovered a tubercle bacillus in cutting an erythematous node, and guinea-pigs inoculated with scraps from this node developed severe local and general Tb. A number of inaugural theses in France have supplied further testimony. The intradermal tuberculin reaction was positive in 100 per cent. of the patients tested and an inherited tbc. taint was often manifest. Sezary reported in 1912 a case in which erythema nodosum was followed four months later by tbc. meningitis. Jaquero reports two recent cases of erythema nodosum in a girl of 10 and boy of 5, extremely severe, but with rapid and apparently complete recovery. Both children had latent glandular Tb. and the eruption occurred several days after an acute febrile gastric upset in one case and typical grippé in the other. These intercurrent affections may have roused the torpid tubercle bacilli, and as they made their way into the blood they induced a transient tbc. toxemia which in turn induced the erythema nodosum. The prognosis, therefore, is that of the underlying tbc. infection and there is nothing to show that those who develop erythema nodosum are more liable than others to have serious Tb. later. He has had numbers of patients with erythema nodosum who are now in robust health after intervals ranging up to fifteen years.—*Clinical relations between erythema nodosum and tuberculosis*, Jaquero, *Revue Med. de la Suisse Romande*, June, 1916.

